



The Sizewell C Project

8.3 Two Village Bypass Landscape and Ecology Management Plan - Tracked Changes Version

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EXECUTIVE SUMMARY

This version of the Two Village Bypass Landscape and Ecology Management Plan supersedes the Outline Landscape and Ecology Plan to Landscape and Ecology Plan previously submitted as part of the Accepted Changes (January 2021) [AS-263]. The approach aligns with the draft DCO (Doc Ref. 3.1(D)) requirement 22A which requires the two village bypass works to be carried out in accordance with this plan.

The Landscape and Ecology Management Plan (LEMP) seeks to provide This Two Village Bypass Landscape and Ecology Management Plan (LEMP) (Doc Ref. 8.3 A (B)) provides clear objectives and principles for the establishment and long-term management of the landscape, and ecological mitigation proposals identified for the soft estate within the boundaries of the two village bypass (hereafter referred to as the 'site'), following construction of the two village bypass. The spatial extent of the LEMP is the same as the area within the Illustrative Masterplan provided at Figures 53.2.2 to 53.2.5 within Volume 2, Chapter 3 of the Second Environmental Statement Addendum – Volume 2: Environmental Statement Addendum Figures – Chapter 5 Two Village Bypass [AS-197/REP5-066]. The aim of the LEMP is to ensure post-construction habitats are created correctly and managed for their successful establishment and integrated within the surrounding landscape.

Objectives for post-construction habitats and landscape areas have been informed and established through a review of ecological survey information, the landscape strategy, policy requirements and in response to site specific mitigation and consultation.

The overriding intention of the site re-instatement, once the two village bypass has been constructed, is to conserve, restore and enhance landscape character and biodiversity at a landscape scale to provide long-term benefits to the biodiversity of Suffolk as a whole. Where possible/practicable, existing landscape features of importance for ecology and visual screening would/will be retained during construction.

New habitats would/will contribute to enhancing the landscape character of this section of the Rolling Estate Claylands, Rolling Estate Sandlands and Valley Meadowlands. They would also minimise the visual impact of the two village bypass in views from the surrounding landscape, minimise impacts on cultural heritage resources, improve access and recreation infrastructure and ensure the long-term sustainability and resilience of the landscape, including to predicted climate change.

Habitat creation approaches and subsequent management proposals for those of the habitats that will be created are outlined/set out within this document including time frames.

Monitoring of post-construction and existing habitats would/must be undertaken to measure the success of the habitat establishment and subsequent management proposals and to determine if interventions are required.

This ~~Two Village Bypass Landscape and Ecology Management Plan~~ is an appendix to the ~~Associated Development Design Principles [REP3-023]~~ which is a certified document within Schedule 22 of the ~~draft DCO~~ (Doc Ref. 3.1(D)) and, in respect of the two village bypass, is secured by Requirement 22A within Schedule 2 of the ~~Draft DCO~~ (Doc Ref. 3.1(D)).

1 INTRODUCTION

- 1.1.1 This **two village bypass LEMP** ~~seeks to provide~~ (Doc Ref. 8.3 A (B)) ~~provides~~ clear objectives and principles for the establishment and longer-term management, of the landscape, and ecological mitigation ~~proposals~~ identified for the soft estate within the two village bypass site (hereafter referred to as the ~~site~~ 'site'), following construction of the two village bypass ~~site~~. The spatial extent of the **LEMP** is the same as the area covered by the **Illustrative Masterplan** provided at **Figures 53.2.2** to **53.2.5** within **Volume 2, Chapter 3 of the Second Environmental Statement Addendum – Volume 2: Environmental Statement Addendum Figures – Chapter 5 Two Village Bypass** (Doc Ref. 6.14), [REP5-066].
- 1.1.2 The aim of the **LEMP** (Doc Ref. 8.3 A (B)) is to ensure newly created post-construction habitats are successfully created and then correctly managed to ensure their successful establishment and integration within the surrounding landscape.
- 1.1.3 This **two village bypass LEMP** is an appendix to the **Associated Development Design Principles** [REP3-023] which is secured by requirements within Schedule 2 of the **draft DCO** (Doc Ref. 3.1(D)). The **LEMP** is intended to be an operational document that provides guidance for contractors and land managers.
- 4.4.41.1.3 The overarching objective of the **LEMP** (Doc Ref. 8.3 A (B)) is to ~~provide an overview of~~ ~~set out~~ how the habitats to be established along the two village bypass ~~would~~ **must** be created and then managed in the long-term. Objectives for these habitats and areas have been informed and established through a review of ecological survey information, the landscape strategy, policy requirements and in response to site specific mitigation and consultation.
- 4.4.51.1.4 The **LEMP** ~~will~~ **must** be reviewed throughout the detailed design process to ensure it continues to reflect the details of the target communities identified. Details of how the implementation of the **LEMP** ~~will~~ **must** be monitored are set out in section 6 of this **LEMP**.
- 1.1.6 The **LEMP** ~~would be managed by SZC Co. for a total of five years, or until adoption by the Highways Authority. It is expected that the detailed monitoring prescriptions will be managed in accordance with the monitoring principles as set in Table 6.1.~~
- 4.4.71.1.5 Detailed landscape schemes will be submitted pursuant to Requirement 22A before the two village bypass is commenced. The landscape scheme ~~must be managed in accordance with this LEMP unless otherwise agreed~~

by ESC pursuant to Requirement 22A of the dDCO. The first five years of management are critical to the establishment of the landscape. Any agreements with the Highway Authority under Article 21 of the dDCO for adopting the highway will include landscape and ecology management obligations. Detailed descriptions of the proposed development and the different phases of development are provided in **Volume 3, Chapter 5, Appendix 5.2.A** of the **ES Addendum** [[PDB-003](#)]-[REP5-060](#)].

4.1.81.1.6 This document should be read in conjunction with the following documents:

- **Code of Construction Practice (CoCP)** (Doc Ref. 8.11([CE](#)));
- ~~Associated Development Design Principles~~ [\[REP3-023\]](#);
- ~~Associated Development Design Principles~~ [\[REP-035\]](#);
- **Two Village Bypass Plans – Plans for Approval: Two Village Bypass Proposed Landscape Masterplan and Finished Levels –** Sheets 1 and 2 [[REP4-003](#)][REP5-020](#)]; and
- ~~mitigation strategies for relevant protected and notable species, as identified in~~ **Volume 5, Chapter 7** of the **ES** [[APP-425](#)].
- ~~Draft protected species licences for Badger~~ [\[REP5-054\]](#) and ~~Water Vole~~ [\[REP5-055\]](#) and non-licensable method statements for bat, great crested newt, otter and reptiles, as appended to the **CoCP** (Doc Ref. 8.11(E)).

1.1.7 Level 1 control documents will either be certified under the DCO at grant or annexed to the DoO. All are secured and legally enforceable. Some Level 1 documents are compliance documents and must be complied with when certain activities are carried out. Other Level 1 documents are strategies or draft plans which set the boundaries for a subsequent Level 2 document which is required to be approved by a body or governance group. The obligations in the DCO and DoO set out the status of each Level 1 document.

1.1.8 This **LEMP** (Doc Ref. 8.3 A (B)) is a Level 1 document and must be complied with through the construction in the management of the two village bypass unless otherwise agreed with East Suffolk Council. This is secured by Requirement 22A(5) of the **DCO**. Any updates to this document must be approved by the East Suffolk Council in accordance with the procedure set out in Schedule 23 of the DCO. This **LEMP**

requires further documents to be submitted for approval at particular stages of the Sizewell C Project:

- Habitat creation method statements (to East Suffolk Council)
- Monitoring strategy (to the Ecology Working Group)

1.1.9 Where further documents or details require approval, this document states which body or governance group is responsible for the approval and/or must be consulted. Any approvals by East Suffolk Council, Suffolk County Council or the MMO will be carried out in accordance with the procedure in Schedule 23 of the DCO. The DoO establishes the governance groups and sets out how these governance groups will run and, where appropriate, how decisions (including approvals) should be made. Any updates to these further documents or details must be approved by the same body or governance group and through the same consultation and procedure as the original document or details.

1.1.10 Where separate Level 1 or Level 2 control documents include measures that are relevant to the measures within this document, those measures have not been duplicated in this document, but cross-references have been included for context. Where separate legislation, consents, permits and licences are described in this document they are set out in the **Schedule of Other Consents, Licences and Agreements** (Doc Ref. 5.11(B)).

1.1.11 For the purposes of this document the term 'SZC Co.' refers to NNB Nuclear Generation (SZC) Limited (or any other undertaker as defined by the DCO), its appointed representatives and the appointed construction contractors.

2 DOCUMENT STRUCTURE

2.1.1 The structure of this document is as follows:

- **Section 3:** sets out the baseline for the existing landscape typologies, habitats and soils types within the site;
- **Section 4:** sets out the landscape and ecological vision of the **LEMP**;
- **Section 5:** sets out management prescriptions per habitat type; [and](#)
- **Section 6:** sets out monitoring requirements per habitat type; [and](#)
- **Section 7:** lists the document references.

2.1.2 In addition to the above, this **two village bypass LEMP** is supported by **Figures 1** and **2**. These figures appeared originally as **Figure 7.1** within **Volume 5, Chapter 7** of the ES [\[APP-427\]](#), and **Figure 6.3** within **Volume 5, Chapter 6** of the ES [\[APP-423\]](#) but have been updated in this LEMP to reflect the current proposals. **Figure 3** has been produced specifically for this document.

3 BASELINE

3.1 Existing habitats and landscape typologies

a) National Character Areas

- 3.1.1 The Suffolk Coast and Heaths NCA 82 (Ref. 1.1) is situated on the North Sea coast between Great Yarmouth to the north and the port town of Harwich to the south. It forms a long, narrow band extending between 10 kilometres (km) and 20km inland. The South Norfolk and High Suffolk Claylands NCA 83 (Ref. 1.2) is located on the western boundary of NCA 82. It occupies a large area of central East Anglia, stretching from just below Norwich in the north to the River Gipping in the south.
- 3.1.2 As shown on Figure 1, the majority of the site and surrounding area are situated within National Character Area (NCA) Profile 82: Suffolk Coast and Heaths. NCA82 shows characteristics of gently undulating farmland with areas of woodland and forest plantation in the surrounding area. This NCA is described within the NCA summary as sparsely settled and “...mainly flat or gently rolling, often open but with few commanding viewpoints”. More than half of the NCA is utilised for arable and pig farming. The remainder of the NCA (beyond the study area) is coast, lowland heaths (Sandlings) and forest plantations. Settlement within the NCA consists “mainly of small villages and iconic coastal market towns” and “remains a lightly populated, undeveloped area”. The main settlements (Lowestoft, Ipswich and Felixstowe) are restricted to the northern and southern extremes of the NCA.
- 3.1.3 West of the Park Gate Farm (see Figure 1), as well as at the northern edge of the study area, the landscape transitions into NCA83: South Norfolk and High Suffolk Claylands. This NCA covers a large area of central East Anglia and is a predominantly flat clay plateau incised by numerous small-scale wooded river valleys. Large areas of woodland are noted as being scarce within this Landscape Character Assessment, with views frequently open and occasionally exposed “although within the valleys it is possible to find quite confined landscapes with intimate views”. NCA83 is also “an area of mixed settlement patterns with nucleated villages found in the west and along the river valleys, intermixed with dispersed hamlets and moated farmsteads. Large, often interconnected village greens or commons are a key feature of the area”. The description also notes that “PRoW, including the Boudicca Way and Angles Way long-distance footpaths, and country estates and parklands continue to provide recreational opportunities”.

- 3.1.4 The site and surrounding study area are generally representative of NCA82, being predominantly located on arable farmland with areas of woodland and forest plantation.
- b) Local landscape character areas/types
- 3.1.5 The following LCTs, as identified within the Suffolk Landscape Character Assessment (Ref. 1.3), are located within 2km of the site and are shown on **Figure 1**:
- Ancient Estate Claylands;
 - Estate Sandlands;
 - Plateau Estate Farmlands;
 - Rolling Estate Claylands;
 - Rolling Estate Sandlands; and
 - Valley Meadows.
- 3.1.6 Most of the site lies within the Rolling Estate Sandlands LCT, transitioning to the Valley Meadowlands LCT at Whin Covert in the west, then Rolling Estate Claylands LCT at the north-western corner of the site around Park Gate Farm.
- 3.1.7 The Rolling Estate Sandlands LCT is described in the Suffolk Landscape Character Assessment as a “*complex and intimate landscape on valley sides*”. It is located on the valley sides of the River Alde, with tree belts and plantations a common feature that help create the complex and intimate landscape. This LCT is generally a focus of settlement, although less so within the study area.
- 3.1.8 The Valley Meadowlands LCT is located along the valley floor of the River Alde and its tributaries, west of Whin Covert. It is a generally flat landscape, often formed of grassland divided by wet ditches. Many fields are pasture and are grazed by cattle, but there are areas where fields have been converted to arable. Within the study area there are also some areas of carr or scrubby riparian woodland breaking up views along the valley, which is generally unsettled.
- 3.1.9 The Rolling Estate Claylands LCT is found on rolling valley sides, which within the study area includes the east facing valley slopes of the River Alde. These are broadly characteristic of this LCT, having a rolling

landform and fragmented woodland cover, as well as containing the landscape park at Glemham Hall and several areas of woodland.

c) **Baseline habitats**

- 3.1.10 **Figure 2** details the broad habitat categories as defined by the Phase 1 habitat categories (Ref. 1.4), present within the site.
- 3.1.11 The habitats present within the site boundary predominantly comprise predominantly intensively managed arable fields with no scarce arable weeds or other notable plant species identified. Arable field margins are a habitat listed under Suffolk's Priority Species and Habitats List. However, no botanically rich arable margins were identified within the site.
- 3.1.12 There are also small areas of semi-improved grassland which are heavily grazed by cattle and a horse paddock, as well as improved managed floodplain grassland within the River Alde corridor, interspersed with patches of tall ruderal and scattered scrub. A section of the River Alde and a related seasonally wet ditch system is within the site.
- 3.1.13 The fields are bounded by fences and hedgerows, with the majority of the hedgerows present being intact species-poor hedgerows, species-rich hedgerows with trees and defunct species-poor hedgerows although intact species-rich hedgerows, defunct species-rich and species-poor hedgerows with trees are also present.
- 3.1.14 Several blocks of woodland are present within the surrounding area. Foxburrow Wood CWS is an ancient woodland located immediately to the east of the site. There are seven other small, broadleaved copses present within the surrounding area comprising lowland mixed deciduous woodland.
- 3.1.15 Twenty-five ponds have been identified within 500m of the site.
- 3.1.16 Protected species relevant to the scheme include, terrestrial invertebrates, the breeding bird assemblage, bat assemblage and both otter and water vole which are present along the River Alde corridor.
- 3.1.17 ~~Further information can be found in **Volume 2, Chapter 14** of the **Environmental Statement [APP-224]**.~~
- 3.1.17 Further contextual information about the terrestrial ecology baseline can be found in **Volume 5, Chapter 7 [APP-425]** and **Volume 5, Chapter 7, Appendix 7A [APP-426]** of the Environmental Statement.

3.2 Soils

- 3.2.1 The underlying geology predominantly comprises sands and gravels, with overlying deposits of alluvium in places. The differences in the solid and drift geology present have resulted in differences in the characteristics of the soils present and will have influenced the land management practices undertaken, and therefore the habitat types present.
- 3.2.2 In the western part of the site (with the exception of the area around the floodplain associated with the River Alde) the soils are slightly acid loamy and clayey soils with impeded drainage. These soils belong to the Burlingham 3 Soil Association¹. The main land use associated with these soil types is cereals, sugar beet and other arable crops.
- 3.2.3 Within the area of the River Alde floodplain, the soils are deep peat soils associated with clayey over sandy soils which in part are very acidic. These soils belong to the Mendham Soil Association. The main land use on these soils is permanent grassland, cereals, sugar beet and potatoes (where groundwater control (i.e. lowering) is possible).
- 3.2.4 Across the rest of the site the soils are freely draining slightly acid sandy soils belonging to the Newport Soil Association. The main land use on these soils is arable crops such as barley, other cereals and sugar beet, with some coniferous woodland and lowland heath habitats.

¹ A Soil Association represents a group of soil types which are typically found occurring together in the landscape.

4 LANDSCAPE AND ECOLOGY VISION

4.1 Objectives

- 4.1.1 The objectives that underpin this management plan are designed to contribute towards the overall design ~~vision and landscape~~ strategy principles for the development as articulated in the **Associated Development Design Principles** [REP3-023(Doc Ref. 8.3) [REP7-035].
- 4.1.2 The overriding intention is to conserve, restore and enhance landscape character and biodiversity. Where ~~possible~~practicable, existing landscape features of importance for ecology and visual screening ~~would~~must be retained during the construction of the two village bypass, such as Foxburrow Wood, Pond Wood and Nuttery Belt.
- 4.1.3 ~~Inevitably given~~Given the scale of development, construction ~~would~~will result in the removal of vegetation and habitat loss and fragmentation (but mainly of relatively lower value arable land). The intention is to integrate the two village bypass into the landscape that it passes through to contribute to enhancing the landscape character of this section of the Rolling Estate Claylands, Rolling Estate Sandlands and Valley Meadowlands.
- 4.1.4 Other design objectives are to create and manage planting to minimise the visual impact of the two village bypass in views from the surrounding landscape. This ~~would~~will minimise impacts on cultural heritage resources, improve access and recreation infrastructure and ensure the long-term sustainability and resilience of the landscape – including to predicted climate change.
- 4.1.5 Specific landscape and ecological objectives, which ~~will~~must guide long-term management, are as follows:
- To return the temporary construction areas along the route to their current uses, which are predominantly arable and improved pasture agriculture respectively.
 - To reinforce and expand existing linear wooded corridors and create others to provide greater long-term connectivity for bats and other species on a landscape scale. Specifically, native woodland ~~would~~to be created in the vicinity of Foxburrow Wood.
 - To maximise the capacity of wildlife and landscape to cope with climate change, using a planting palate of species resilient to drought and disease that are not reliant on irrigation measures.

- To ensure mitigation structures such as oversized culverts remain functional and provide safe crossing points for protected species over the course of the operational phase.
- To ensure the River Alde corridor remain as naturalistic as practicable and remains vegetated to provide greater long-term connectivity for a range of species.
- To ensure landscape features and mitigation areas for nocturnal species are not illuminated or subject to light spill and that dark corridors are provided.
- To provide enhancement ponds ~~which would~~ provide additional pond habitat in the area and contribute to bio-diversity net gain and ~~which will~~ function as an enhancement of the aquatic habitats and habitat connectivity within the site post development.

4.1.6 These management objectives have been designed with the aim of enabling restoration at a landscape scale. The integration of infrastructure, landscape and access; and minimising habitat severance and increasing connectivity ~~would~~ will provide long-term benefits to biodiversity of Suffolk as a whole rather than at a site level.

4.2 ~~Habitat types~~ Types - Overview

4.2.1 This **two village bypass LEMP** ([Doc Ref. 8.3 A \(B\)](#)) provides management and monitoring specifications for the following broad landscape types that are ~~proposed~~ to be created, enhanced or restored following completion of construction within the development site boundary. **Figure 3** illustrates the habitat types that ~~would~~ will be created on the post-construction site within the [DCO site](#) boundary, ~~subject to and which are covered by~~ this **two village bypass LEMP**. The habitat types are as follows:

- arable farmland;
- improved grassland;
- broadleaved woodland;
- scattered [/specimen](#) trees;
- native hedgerows;
- [species rich grassland](#):

- floodplain grassland;
- ponds / waterbodies; and
- semi-improved grassland.; and
- floodplain grassland.

- ditches.

4.3 Habitat Types

a) Arable Farmland

4.3.1 Areas subject to temporary possession ~~would~~must be restored back to arable agriculture, where that is the current land use. These fields ~~would~~therefore revert back to and continue to be managed by the landowner as they are at present with field margins being retained and are therefore not the focus of this **two village bypass LEMP**– (Doc Ref. 8.3 A (B)).

b) Improved Grassland

4.3.2 Following completion of construction, ~~several~~those fields identified on Figure 3 as areas for indicative floodplain grassland along the River Alde ~~would~~must be reseeded with grass and returned to pasture. These fields that fall within the temporary land take would continue to be managed by the landowner as they are at present and are therefore not the focus of this **two village bypass LEMP**– (Doc Ref. 8.3 A (B)).

c) Broadleaved Woodland

4.3.3 New areas of woodland ~~would~~will be established through planting. The new woodland ~~would~~will buffer and link existing areas of woodland within the site, as well as provide visual screening, and ~~would be~~must be predominantly native broadleaved with a small component of mixed woodland (to increase climate change resilience). It ~~would~~must have structural and species diversity, and management ~~would~~must be aimed at enhancing biodiversity value rather than commercial timber management.

d) Scattered Trees

4.3.4 New areas of scattered trees ~~are proposed~~must be planted around ~~some~~ road junctions and infiltration basins in order to provide a transition between broadleaved woodland and grassland–, unless visibility splays for the junctions or access requirements for the basins prevent their planting. The trees ~~would~~must be native broadleaved, with species diversity, and management ~~would~~must be aimed at enhancing biodiversity value.

e) ~~Speciment~~Specimen Trees

4.3.5 Existing individual specimen trees, particularly veteran or ancient trees, must be retained wherever practicable. Planting of individual ~~speciments~~specimen trees ~~is proposed~~must be undertaken in the vicinity of veteran or ancient trees that ~~would~~will be lost as part of the

proposals construction. These trees would must be of the same species as the veteran or ancient trees lost, and of local provenance where possible. Management would must be aimed at allowing these specimen trees to develop an open crown that could mature into a veteran or ancient tree over time.

4.3.6 Bat ‘hop-overs’ will be created using retained mature vegetation and / or transplanted specimen trees. This approach has the best opportunity of permitting safe passage across the road for bats at the earliest opportunity. These ‘hop-overs’ will be linked into existing retained and newly proposed hedgerows and new woodlands as much as is possible.

4.3.7 Planting/transplanting methods and design will need to be agreed with the highway authority but will be focussed on the key locations identified below. An image of a crossing point on the existing B1122, with tall vegetation is presented as below in **Error! Reference source not found.**



Image 1: An example of a hop-over formed of tall vegetation across the existing B1122

4.3.8 Surveys have been conducted across the TVB site to identify areas which are likely to require mitigation to facilitate road crossing by bats. Nine locations where vegetation or features that have potential be used by commuting bats were identified from aerial imagery, these are presented in **Error! Reference source not found.** Of the nine locations investigated, the following six locations met the threshold to potentially require a ‘hop-over’: 1, 2, 3, 4, 5 and 8. The locations of these is presented in **Error! Reference source not found.** Whether these six locations require a ‘hop-over’ is being clarified by further surveys.

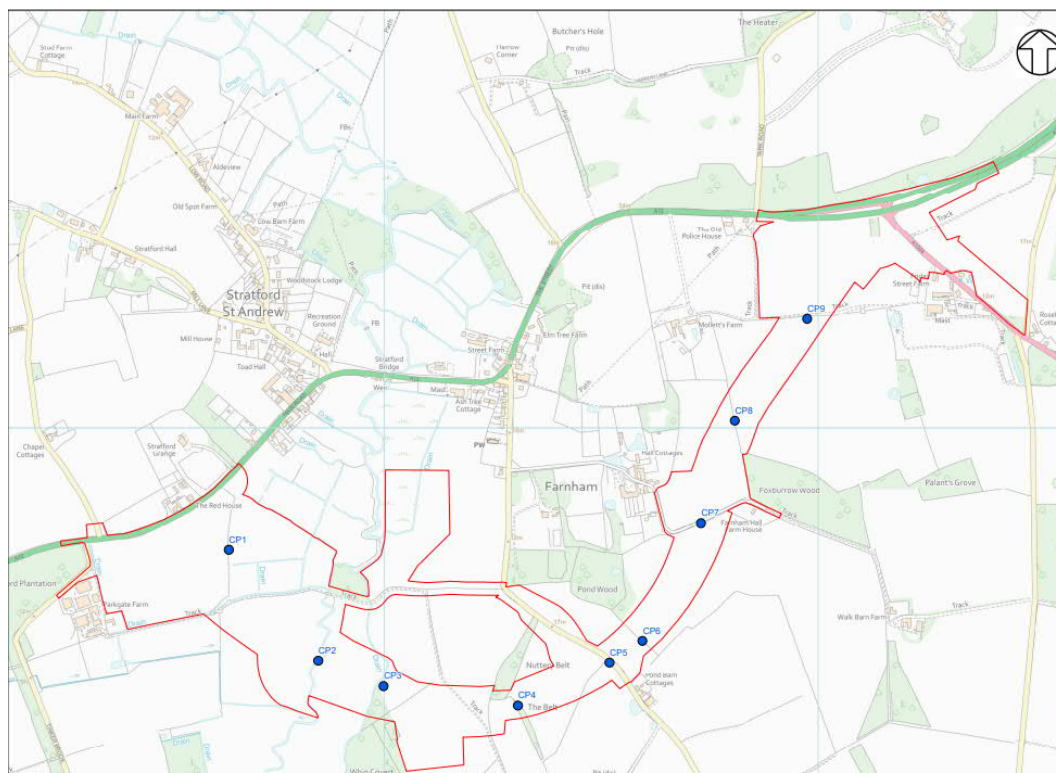


Image 2: Potential bat 'hop-over' locations (see text for details)

f) Native Hedgerows

4.3.64.3.9 New and replacement hedgerows **would must** be created along much of the route of **Two Two** village bypass, to provide landscape integration and habitat linkages. Hedgerows **would must** contain native species, including a proportion of tree species, and be species rich.

g) Grassland

4.3.74.3.10 Following completion of construction, those sections of the post-construction area comprising clay soils (to the east of the River Alde) **would must** be seeded to create species rich grassland, that is neutral semi improved grassland. There **would will** be different end use requirements dependant on specific locations of the grassland e.g. around infiltration basins and swales or at created ponds. The grassland **would must** comprise a native species mix including the following grass species: Crested Dog's-tail (*Cynosurus cristatus*), Quaking-grass (*Briza media*), Sweet Vernal-grass (*Anthoxanthum odoratum*), Yellow Oat-grass (*Trisetum flavescens*), Red Fescue (*Festuca rubra*) and Common Bent (*Agrostis capillaris*). Forb species **would must** include the following: Common Knapweed (*Centaurea*

nigra) Oxeye Daisy (*Leucanthemum vulgare*), Common Bird's-foot-trefoil, Lady's Bedstraw (*Galium verum*), Common Sorrel (*Rumex acetosa*), Meadow Vetchling (*Lathyrus pratensis*), Meadow Buttercup (*Ranunculus acris*), Ribwort Plantain (*Plantago lanceolata*), Cowslip (*Primula veris*) and Cat's-ear (*Hypochaeris radicata*).

4.3.84.3.11 Those sections of the alignment which sit on free draining acid soils would must be seeded to create species-rich grassland, that is semi-improved acid grasslands. The grassland would must comprise a native species mix including the following grass species: Sheep's Fescue (*Festuca ovina*), Slender Red Fescue (*Festuca rubra subsp. litoralis*), Common Bent, Crested Dog's-tail, Sweet Vernal Grass and Wavy Hair-grass (*Deschampsia flexuosa*). Forbe species would must include the following: Yarrow (*Achillea millefolium*), Autumn Hawkbit (*Scorzoneroides autumnalis*) Common Knapweed, Ribwort Plantain, Lady's Bedstraw, Cat's-ear, Common Bird's-foot-trefoil, Meadow Buttercup, Ragged-Robin (*Silene flos-cuculi*), Common Sorrel, Sheep's Sorrel (*Rumex acetosella*), Devil's-bit Scabious (*Succisa pratensis*) and Tufted Vetch (*Vicia cracca*).

4.3.94.3.12 Where areas cannot be practically seeded such as steep embankments in areas of cutting bare substrate will must be left to naturally colonise with vegetation from surrounding habitat.

h) Floodplain Grassland

4.3.104.3.13 Following completion of construction, an area of approximately 2.77ha of existing improved grassland adjacent to the River Alde crossing within the site boundary would and as indicated on the Illustrative Masterplan provided at Figures 3.2.2 to 3.2.5 within Volume 2, Chapter 3 of the Second Environmental Statement Addendum [REP5-066] must be enhanced to create floodplain grassland to mitigate for the loss of improved floodplain grassland during construction. The existing floodplain grassland within this area is of low value, comprising predominantly a sown agricultural ley of perennial ryegrass and the focus would must be on the creation of higher quality habitats, through improving both the diversity of the grassland sward and the habitats within ditches close to the River Alde.

4.3.14 SZC Co notes that the EA has welcomed the commitment to provide mitigation for the loss of floodplain grazing meadow from the construction of the two village bypass, and the creation of more diverse and higher value habitats. The proposed approach to creating higher diversity grasslands is likely to include some shallow of removal of topsoils, to reduce soil fertility and then sowing with a suitable native sward. The alternative would be to take regular hay cuts of the existing sward (with removal), to reduce soil fertility over time and allow natural re-colonisation by other species of the sward (e.g. where poached by cattle).

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4.3.15 The final approach must be detailed in the method statement as set out in Section 5 below.

i) Ditches

4.3.14 4.3.16 New wetland channels ~~would~~ totalling at least 150m in length will be created to mitigate the loss of approximately 143m of ditch associated with the land take from the proposed bypass footprint in this location which form the most valuable element of the existing floodplain grassland.

4.3.17 The approach to creating wetland channels within the floodplain grassland would be aligned with the principles of the approach being undertaken to enhance existing watercourses on the Sizewell link road, albeit that the new wetland channels to be created in the River Alde valley will not serve an active drainage function. The general approach will be to create carefully profiled ditches at least some of which link to existing surface water channels. Natural colonisation of bank margins will be the preferred approach to habitat establishment.

5 MANAGEMENT PROPOSALS

5.1 Overview

- 5.1.1 **Table 5.1** sets out ~~an overview of~~ the construction phase and pre-establishment management ~~proposals~~measures. **Table 5.2** sets out the management ~~proposals~~measures for habitats that ~~would~~will be created. **Table 5.3** sets out faunal enhancement management ~~outline~~proposalsmeasures.
- 5.1.2 Establishment and aftercare works ~~are to~~must be carried out by an approved landscape sub-contractor in accordance with good horticultural practice and the relevant British standards at the time of implementation.
- 5.1.3 Management procedures ~~would~~must be reviewed annually ~~by the approved sub-contractor~~ to ensure management proposals are aligned with habitat creation.

5.2 Ground preparation and soil management

- 5.2.1 The availability of soil resources in the right condition ~~would be~~is critical to the establishment of the required habitats. ~~Topsoil and subsoil would be stripped and stockpiled (separately) on site so that it is available for reinstatement.~~
- 5.2.2 All soils would be handled in accordance with the ~~Outline Soil Management Plan [REP3-018], with a detailed soil resource plan to be prepared for the site by the contractor at a later date, as per measures set out in section 9, Part C~~ the Code of Construction Practice (Doc Ref. ~~8.11(C)-8.11 (E)~~ Requirement 2) and the Soil Management Plan ~~once it has been approved by East Suffolk Council (required under the CoCP).~~ This ~~would set~~sets out the ways in which soils ~~would~~must be stripped, transported, stockpiled and restored, with a reconditioning step detailed ~~should it be required.~~ These ~~would~~ follow published best practice guidance and ensure that reinstated soils have the right physical and chemical characteristics for their required end use.
- 5.2.3 ~~Soil materials with different characteristics would be stockpiled separately. This would ensure that the soil types which support the different habitats can be recreated in the required locations.~~
- 5.2.4 The requirements and methods for habitat creation ~~would~~must be included in a dedicated habitat creation method ~~statements.~~

5.2.3 statement. The method statement must include acceptance criteria for the soils required for each habitat type and be submitted to East Suffolk Council for approval prior to works commencing.

5.2.4 In relation to the floodplain grassland, where an area of approximately 2.77ha of existing improved grassland adjacent to the River Alde crossing within the site boundary must be enhanced, the approach must be detailed in the method statement. The method statement must include the rationale behind the approach, either based on a manipulation of the soil (for example through topsoil stripping or soil inversion) or nutrient cropping to reduce soil fertility over time.

Table 5.1: ~~Construction~~Establishment phase ~~proposals~~management

Management Item Reference	Management Item	Proposed Management <u>measures</u>	Timeframe/Frequency on Management Actions
Watering			
W1	Planting and seeding	Planting should <u>must</u> be aligned with appropriate seasons (spring and late autumn) to reduce the requirement for watering. The Contractor shall monitor watering Watering requirements for all new seeding and planting <u>must be monitored</u> until all establishment works are completed. Any losses are to be replanted in the next dormant season.	As required
Use of Herbicides and Fertilisers			
HF1	Herbicides and fertilisers	Following reinstatement, herbicides or fertilisers shall <u>must</u> not be used for any maintenance or management operations that may cause harm to existing land uses (i.e. publicly accessible areas, or agricultural areas) or existing habitats.	Following reinstatement

Table 5.2: ~~Proposed management proposals~~Management measures for newly created habitats

Management Item Reference	Management Item	Proposed Management <u>measures</u>	Timeframe/Frequency on Management Actions
Weed Control			
WC1	Injurious weeds	Weed control relates to infestations of injurious weeds as follows: Broad-leaved Dock (<i>Rumex obtusifolius</i>), Curled Dock (<i>Rumex crispus</i>), Common Ragwort	March-October As required

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Management Item Reference	Management Item	Proposed Management measures	Timeframe/Frequency on Management Actions
		<p>(<i>Senecio jacobaea</i>), Creeping Thistle (<i>Cirsium arvense</i>) and Spear Thistle (<i>Cirsium vulgare</i>).</p> <p>Injurious weed control would<u>must</u> use mechanical means of control such as topping or pulling where appropriate<u>.</u> In the event that injurious weeds are found on site specialist advice would<u>must</u> be sought for any occurrences of invasive species, including Giant Hogweed (<i>Heracleum mantegazzianum</i>) and Japanese Knotweed (<i>Fallopia japonica</i>).</p>	
WC2	Invasive species	In the event that species listed under Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) (Ref. 1.38) are found on site during the monitoring, an invasive weeds specialist should develop an Invasive Species Management Plan to specify the treatment methods and measures to prevent the spread of these species <u>must be implemented</u> .	March-October As required
WC3	Herbicide application	Where weed killing is by a selective translocated herbicide, the herbicide shall <u>must</u> be applied during a period of active growth in accordance with the manufacturer's instructions. Weed-killing shall <u>will</u> be achieved by the total die-back of weeds. In the case of selective weed control there shall <u>must</u> be not more than 5% re-growth during the season.	March-October As required
WC4	Herbicide application	Where weed control is by spot application, a translocated herbicide shall <u>must</u> be applied with a device that ensures that the herbicide touches weed species only.	March-October As required
WC5	Removal of weeds by hand	Where weed control by pulling/hand-weeding, the work shall <u>must</u> consist of the removal of the entire weed, including roots, by digging, forking, hoeing or pulling. Weeds shall <u>must</u> be removed prior to flowering and the arisings removed from site.	March-October As required
TBC	TBC	TBC	TBC

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Management Item Reference	Management Item	Proposed Management <u>measures</u>	Timeframe/Frequency on Management Actions
Broadleaved Woodland			
BW1	Planting	<p>Planting would be undertaken in the dormant season (November to February) in random single species groups of 5 – 20 plants at centres varying between 1.4 – 2.5m, to avoid excessive overcrowding and shading out problems.</p> <p>Planting shall be done on a ratio of roughly 40% to 50% canopy trees, 20% to 30% understorey trees and scrub, and c.30% open space.</p> <p>Tree guards will be used to protect woodland planting.</p> <p>Any stakes, guards and ties are to be monitored, replaced and adjusted to ensure tree growth is not adversely affected.</p>	Construction Phase November to February
BW2 <u>BW1</u>	Tree replacement	<p>Any trees that fail or become damaged or diseased shall<u>must</u> be removed and replaced in the next planting season with others of similar size and species.</p> <p><u>Planting must be undertaken in the dormant season (November to February) in random single species groups of 5 – 20 plants at centres varying between 1.4 – 2.5m, to avoid excessive overcrowding and shading out problems.</u></p> <p><u>Planting must be done on a ratio of roughly 40% to 50% canopy trees, 20% to 30% understorey trees and scrub, and c.30% open space.</u></p> <p><u>Tree guards must be used to protect woodland planting.</u></p> <p><u>Any stakes, guards and ties must be monitored, replaced and adjusted to ensure tree growth is not adversely affected.</u></p>	To be undertaken in planting season - November to February As required
BW3 <u>BW2</u>	Weeding	<p>All weed growth shall<u>must</u> be controlled using mechanical means, such as strimming. Chemical treatments are to<u>must only</u> be used only as a last resort and should<u>must</u> not be used in areas accessible to the public.</p>	May-October As required

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Management Item Reference	Management Item	Proposed Management <u>measures</u>	Timeframe/Frequency on Management Actions
Scattered/Specimen Trees			
ST1	Planting	Planting would <u>must</u> be undertaken in the dormant season (November to February) in random single species groups of 3 - 5. Tree guards will <u>must</u> be used for individual trees. Any stakes, guards and ties are to <u>must</u> be monitored, replaced and adjusted to ensure tree growth is not adversely affected.	<u>Construction Phase</u> November to February
ST2	Tree replacement	Any trees that fail or become damaged or diseased shall <u>must</u> be removed and replaced in the next planting season with others of similar size and species.	To be undertaken in planting season - November to February As required
ST3	Weeding	All weed growth shall <u>must</u> be controlled using mechanical means, such as strimming. Chemical treatments are to <u>must only</u> be used only as a last resort and should <u>must</u> not be used in areas accessible to the public.	May-October As required
<u>ST4</u>	<u>Bat hop-overs - replacement of failed planted and transplanted trees</u>	<u>Trees must be inspected annually after installation. If trees have failed a suitable replacement (of an appropriate size and species) must be planted.</u> <u>All other Maintenance recommendations are as per other scattered / Specimen trees and should follow ST1 -3 above.</u>	<u>Annually</u>
Native Hedgerows			
H1	<u>Hedgerow replacement planting</u> Planting	<u>Any sections of hedgerows that fail or become damaged or diseased must be removed and replaced in the next planting season with similar species.</u> Planting of whips would <u>must</u> be undertaken in the dormant season (November to February). Whips should <u>must</u> be planted in double rows at a spacing of 20—30cm. Any stakes, guards and ties are to <u>must</u> be monitored, replaced and adjusted to	<u>Construction Phase</u> <u>To be undertaken in planting season - November to February</u> <u>One per annum</u>

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Management Item Reference	Management Item	Proposed Management measures	Timeframe/Frequency on Management Actions
		ensure hedgerow growth is not adversely affected.	
H2	Hedgerow replacement planting	Any sections of hedgerows that fail or become damaged or diseased shall be removed and replaced in the next planting season with similar species.	To be undertaken in planting season – November to February One per annum
H3H2	Hedgerow margins	Hedgerow margins of a minimum 2m are to must be left undisturbed. The margins should must be cut either annually or bi- annually in late summer, after the flowers have seeded.	Main cut late Summer (late July/early August) One per annum
Grassland			
G1	Grass cutting	To be determined <u>as part of detailed design</u> based on final specified grassland mixes.	To be based on specified grassland mixes.
G2	Scrub removal	Unless required for screening, or where it provides a boundary habitat, or is developing into desirable areas of <u>Where required, scrub, scrub shall will</u> be managed and should only be or removed outside the breeding bird season to retain <u>promote</u> an open grassland sward and maintain the grassland and scrub mosaics. Scrub will not be removed where it is required for screening, or where it provides a boundary habitat.	September to February inclusive One per annum
Floodplain Grassland			
FG1	Grass cutting	In areas of the site where <u>floodplain</u> grassland is retained, enhancement would will be delivered via enhancement <u>enhanced</u> management regimes by cutting and the removal of arisings on a bi-annual/annual basis. Where areas of <u>floodplain</u> grassland are newly created under a dedicated habitat creation plan, once these become established, enhancement would be delivered via enhancement <u>enhanced</u> management regimes by cutting and the	Spring and autumn (April/May and September/October) One/two per annum.

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Management Item Reference	Management Item	Proposed Management measures	Timeframe/Frequency on Management Actions
		removal of arisings on a bi-annual/annual basis.	
FG2	Scrub removal	Unless required for screening, or where it provides a boundary habitat, or is developing into desirable areas of scrub, scrub shall <u>must</u> be managed and should . <u>It must</u> only be removed outside the breeding bird season to retain an open grassland sward and maintain the grassland and scrub mosaics.	September to February inclusive One per annum
New ditches within River Alde corridor			
D1	Ditch management	Ditches to <u>will</u> be slubbed as required (but no more frequently than 1 in 5 years), between mid-September and the end of February to avoid breeding birds unless other ecological mitigation measures have been agreed <u>with the Ecology Working Group</u> . Water vole mitigation required, with pre-cutting to discourage voles in advance. Only short lengths to <u>of ditched and open water must</u> be slubbed rather than whole ditch lengths. Management of one side <u>Multiple sides</u> of a ditch only <u>must not be slubbed at any one</u> the same time. Scrub will <u>must</u> be managed to ensure it does not encroach on ditches to prevent overshading <u>over-shading</u> .	September-February One per annum
Ponds			
P1	Water depth management	Monitor water and silt <u>Water</u> levels in June . To <u>to be topped</u> up using non-chlorinated/untreated water as required to ensure depth of ca. 50% of planned maximum <u>depth during the establishment period</u> . Undertake general <u>General</u> aquatic vegetation removal <u>must be undertaken</u> in December-January to maintain silt level below 500mm from original pond base.	December-January One per annum.

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Management Item Reference	Management Item	Proposed Management <u>measures</u>	Timeframe/Frequency on Management Actions
P2	Vegetation Removal	Monitor The balance of open water to aquatic/marginal vegetation <u>must be monitored</u> in June every 2 years. Undertake clearance Clearance of vegetation <u>must be undertaken</u> on a rotational basis (5-7 years or as required) Removal of vegetation to <u>must</u> be undertaken/ supervised in December-January <u>annually</u> .	<u>Monitoring annually in June</u> <u>Clearance</u> December-January As required.
P3	Scrub removal	Monitor scrub Scrub encroachment around banks <u>must be monitored</u> in June. Ensure every 2 years to ensure scrub does not dominate and shade pond. Cut scrub Scrub <u>must be cut</u> back in November <u>every 2 years</u> to ensure shading of pond is less than 25%.	Every 2 years
P4	Pollution	Ensure pond is not degraded through pollution. Monitor for signs of eutrophication (algal blooms) or vegetation yellowing or death. <u>must be undertaken to ensure pond is not degraded through pollution.</u>	One/two per annum As required.
P5	Non-native species management	Inspect ponds Ponds <u>must be inspected</u> for invasive aquatic species. Do not transfer water Water/sediment/vegetation <u>must not be transferred</u> from other waterbodies. Removal of non Non-native aquatic vegetation to <u>must</u> be <u>removed</u> immediately undertaken if noted.	As required.

Table 5.3: Faunal enhancement management ~~proposals~~measures

Management Item Reference	Management Item	Proposed Management <u>measures</u>	Timeframe/Frequency on Management Actions
FE1	Reptile hibernacula	No maintenance is required for the hibernacula, but if the structure is no longer suitable	One check per annum

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Management Item Reference	Management Item	Proposed Management measures	Timeframe/Frequency on Management Actions
		for wildlife (i.e. collapsed such that there are no longer cavities) then replace like for like it must be replaced to the same specification.	
FE2	Reptile egg laying	No maintenance is required for the reptile egg laying sites, but if the structure is no longer suitable for wildlife (i.e. collapsed such that there are no longer cavities) then replace like for like it must be replaced to the same specification.	One check per annum
FE3	Bat boxes	Any lost or damaged bat boxes to must be replaced once they have been checked by a licenced bat worker to ensure that no bats are present.	As required

Table 5.4: Other features management measures

<u>Management Item Reference</u>	<u>Management Item</u>	<u>Management measures</u>	<u>Timeframe/Frequency on Management Actions</u>
<u>OF1</u>	<u>Acoustic barriers (bunds or fences)</u>	<u>Retention of bund crests at their designed height and across their design footprint, and making good of any cracks, splits or other holes through any acoustic fences, including at the base.</u>	<u>To be undertaken throughout the period of the construction of the Sizewell C project. Inspections to be carried out at least every two years unless agreed otherwise.</u>

6 MONITORING REQUIREMENTS

6.1 General Monitoring

6.1.1 During the ~~short term~~ (initial establishment) period ~~which is likely to be of~~ twelve months from completion of construction ~~of the two village bypass~~, inspections ~~shall~~must take place by a suitably qualified specialist biannually in spring and late summer. After the first twelve months inspections ~~would~~must be carried out annually in late summer, ~~until adoption of unless~~ otherwise agreed with East Suffolk Council. Any Article 21 agreements with the scheme by the Highways Highway Authority will include any appropriate monitoring obligations for the highway which is being adopted. These monitoring inspections will be used to measure the success of the management ~~proposals~~measures and determine if interventions are required in order to deliver the landscape and ecology vision. ~~This will be undertaken by the Environment Review Group. Monitoring proposals as detailed in Table 6.1, all specific detailed monitoring prescriptions will be in accordance with the requirements set out below.~~

6.1.2 Monitoring requirements are set out in Table 6.1, however specific detailed monitoring prescriptions will be detailed in a Monitoring Strategy for the established habitats which will be submitted to and approved by the Ecology Working Group. All monitoring must be reported to the Ecology Working Group and interventions will be required where results show that the overall design vision and landscape strategy for the development as articulated in the Associated Development Design Principles (Doc. Ref. 8.3) [REP7-034].

6.1.3 Ecology monitoring of species must be carried out in accordance with the Terrestrial Ecology Monitoring and Mitigation Plan (Doc Ref. 9.4(B)) (Requirement 4) and protected species licences as granted by Natural England and therefore is not duplicated here.

Table 6.1: Monitoring ~~proposals~~ requirements

Habitat / Feature Type	Party responsible	Timing of Monitoring	Requirements
Establishment	SZC Co. will be responsible for a total of 5 years from completion of works or until adoption by Highways <u>any agreements are made with the Highway Authority under Article 21 of the dDCO for adopting the highway</u>	Various	<p>There is always uncertainty where new habitat is being established. This is impacted by weather conditions, the quality of seed stock or green hay, variations in the conditions of the site, and problems with pernicious weeds. It is therefore recommended <u>Therefore</u> the management and monitoring of the target habitats <u>must</u> be intensive during the first year and frequent over the subsequent four years to ensure any problems are identified early and resolved as quickly as possible.</p> <p>Checks would <u>Inspections must</u> be undertaken by a suitably qualified specialist.</p> <p>The inspections would <u>must</u> be undertaken to assess the establishment of habitats and the effectiveness of the <u>this</u> LEMP and aftercare prescriptions, paying particular attention to:</p> <ul style="list-style-type: none"> the success of establishment including disease, damage or death of planting; inappropriate use or vandalism; general appearance and condition; the presence of invasive or non-native species that may require treatment; and any evidence of protected species that could have implications for future management. <p>Safety issues reported by the public shall also be investigated as soon as practically possible and remedial works undertaken as necessary Public Engagement.</p> <p>Public engagement would <u>must</u> be undertaken by SZC Co. to keep users of the site informed of the works.</p> <p>A <u>An annual</u> monitoring report would <u>must</u> be prepared for SZC Co and submitted to the Ecology Working Group.</p>

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Target Communities	SZC Co. will be responsible for a total of 5 years from completion of works or until adoption by Highways any agreements are made with the Highway Authority under Article 21 of the dDCO for adopting the highway	Check bi-annually years 0, 1 and 2 Check annually year 3 – 5 Years 5-10 – A review of monitoring requirements would must be undertaken in year 5 to detail timings for Years 5-10. If objectives are not met, then the LEMP would require amendment must be amended.	Before and after enhancement, reinstatement or creation a full botanical species list and quality assessment should must be carried out to monitor the success of restoration and as a baseline for monitoring, this should must include the presence and abundance of species. The NVC National Vegetation Classification may be an appropriate method for collecting data for monitoring or this may be bespoke to the target communities. This would must also include monitoring with regards to achieving the desired communities and quality as demonstrated in the biodiversity net gain report (ES Volume 5, Appendix 7A.4). Monitoring is essential to track the development of the target habitat(s) and troubleshoot any problems. Target communities would be set for each habitat type for years 1, 2, 5 and 10. Success would must be monitored via the yearly monitoring surveys and reporting- which must be submitted to the Ecology Working Group
Woodland	SZC Co. will be responsible for a total of 5 years from completion of works or until adoption by Highways any agreements are made with the Highway Authority under Article 21 of the dDCO for adopting the highway	As above	Targets would be set according to thresholds identified for Section 41/Biodiversity Action Plan quality woodland in the Countryside Stewardship Higher Tier Scheme made specific to the site. Regular checks, at least one per annum, shall must be made during the first five years of establishment to replace dead or diseased specimens, control weeds, re-stake plants as necessary and check deer/rabbit fencing. Monitoring would must follow the Common Standards Monitoring Guidance for Woodland Habitats. This would weight weights desirable species against the injurious ones.

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Scattered/Specimen Trees	SZC Co. will be responsible for a total of 5 years from completion of works or until adoption by Highways any agreements are made with the Highway Authority under Article 21 of the dDCO for adopting the highway	As above	Regular checks, at least one per annum, shall <u>must</u> be made during the first five years of establishment to replace dead or diseased specimens, control weeds, re-stake plants as necessary and check deer/rabbit fencing. Individual specimen trees planted as compensation for the loss of ancient or veteran trees shall <u>must</u> be monitored to ensure suitable space is available around the trees for an open crown to develop.
Hedgerows	SZC Co. will be responsible for a total of 5 years from completion of works or until adoption by Highways any agreements are made with the Highway Authority under Article 21 of the dDCO for adopting the highway	As above	Targets would be set according to thresholds identified for Section 41 of the NERC Act/Suffolk Biodiversity Action Plan quality hedgerows in the Countryside Stewardship Higher Tier Scheme made specific to the site. Regular checks, at least one per annum, shall <u>must</u> be made during the first five years of establishment to replace dead or diseased specimens, control weeds, re-stake plants as necessary and check deer/rabbit fencing. Monitoring would <u>must</u> follow the Hedgerow Survey Handbook.
Grassland	SZC Co. will be responsible for a total of 5 years from completion of works or until	As above	Regular checks, at least one per annum, of the newly established areas of grassland shall <u>must</u> be made during the first five years of establishment. Targets would be set for each grassland type according to the species list gathered before construction and thresholds identified for Section 41 of the Natural Environment and Rural Communities (NERC) Act (Ref. 1.5)/Suffolk

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	adoption by Highways any agreements are made with the Highway Authority under Article 21 of the dDCO for adopting the highway		Biodiversity Action Plan (Ref. 1.6) as well as the Joint Nature Conservation Committee guidance. Monitoring would must follow the Common Standards Monitoring Guidance for Lowland Grassland. This would-weight weights desirable species against the injurious ones.
Floodplain Grassland	SZC Co. will be responsible for a total of 5 years from completion of works or until adoption by Highways any agreements are made with the Highway Authority under Article 21 of the dDCO for adopting the highway	As above	Regular checks, at least one per annum, of the newly established areas of grassland shall must be made during the first five years of establishment. Targets would be set for each grassland type according to the species list gathered before construction and thresholds identified for Section 41 of the Natural Environment and Rural Communities (NERC) Act (Ref. 1.5)/Suffolk Biodiversity Action Plan (Ref. 1.6) as well as the Joint Nature Conservation Committee guidance. Monitoring would must follow the Common Standards Monitoring Guidance for Lowland Grassland. This would weight desirable species against the injurious ones.
New ditches within River Alde corridor	SZC Co. will be responsible for a total of 5 years from completion of works or until adoption by Highways any agreements are made with the Highway Authority	As above	Regular checks, at least one per annum, of the newly established ditch habitat shall must be made during the first five years of establishment to control scrub encroachment. Monitoring would must follow the Common Standards Monitoring Guidance for Ditches.

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	under Article 21 of the dDCO for adopting the highway		
Ponds	SZC Co. will be responsible for a total of 5 years from completion of works or until adoption by Highways any agreements are made with the Highway Authority under Article 21 of the dDCO for adopting the highway	As above	Regular checks, at least one per annum, of the newly established ponds shall must be made during the first five years of establishment. Water and silt levels must be monitored in June annually. Targets would be set for ponds according to thresholds identified for Section 41 of the Natural Environment and Rural Communities (NERC) Act (Ref. 1.5)/Suffolk Biodiversity Action Plan (Ref. 1.6) as well as the Joint Nature Conservation Committee guidance.
Bat hop overs	SZC Co. until any agreements are made with the Highway Authority under Article 21 of the dDCO for adopting the highway	As above	Regular checks, at least one per annum, must be made during the first five years of establishment to replace dead or diseased specimens (of planted / transplanted trees), control weeds, re-stake plants as necessary and check deer/rabbit fencing. Individual specimen trees planted / transplanted should be monitored to ensure that suitable space is permitted for them to develop a full crown (which provides cover across the road above the traffic flow).
Year five survey and review	SZC Co.	Year 5	The following surveys, as a minimum, shall must be included in the year five review: 1 protected species surveys; (including any protected species licensing conditions); 2 monitoring surveys of bat and bird boxes; and 3 the reptile population.

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			<p>The results of the surveys shall<u>must</u> be reviewed to identify any revisions to the management prescriptions<u>measures</u> deemed to be required to meet the objectives for the medium and long-term. Revised prescriptions<u>measures must</u> be produced to guide the next five years. This information shall<u>must</u> be presented as a 'Five Year Monitoring Report' to be shared with relevant stakeholders, upon which and submitted to the Highways Authority will adopt the scheme<u>Ecology Working Group</u>.</p>
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FIGURES